

## AMENDMENTS TO THE CLAIMS

Kindly amend the claims as follows:

### In the claims:

1. (Presently Amended): A compound for inhibiting expression of angiogenin comprising an oligonucleotide or analog thereof having a base sequence complementary to a target portion of a nucleic acid encoding human angiogenin.
2. (Previously Amended): The compound of claim 1 wherein the base sequence binds to the target portion of the nucleic acid in a manner to inhibit the expression of angiogenin.
3. (Previously Amended): The compound of claim 2 wherein the oligonucleotide analog comprises a modification selected from the group consisting of a modified internucleotide linkage, a modified purine or pyrimidine moiety, a modified sugar moiety, a modified 5' hydroxyl moiety, a modified 3' hydroxyl moiety and a modified 2' hydroxyl moiety.
4. (Previously Amended): The compound of claim 3 wherein the modified internucleotide linkage comprises a substituent having an improved aqueous or lipid solubility or improved resistance to nuclease digestion as compared to an unmodified compound.
5. (Previously Amended): The compound of claim 4 wherein the modified internucleotide linkage is selected from the group consisting of phosphorothioate, N-alkyl phosphoramidates, cycloalkyl phosphoramidates, alkyl phosphonates, cycloalkyl phosphonates, phosphodiester, phosphotriester, C<sub>1</sub> - C<sub>4</sub> alkyl, cycloalkyl, short chain heteroatomic backbone, short chain heterocyclic backbone, morpholino backbone, polyprotein-nucleic acid backbone, peptide-nucleic acid backbone, polyamide, CH<sub>2</sub>-NH-O-CH<sub>2</sub>, CH<sub>2</sub>-N(CH<sub>3</sub>)-O-CH<sub>2</sub>, CH<sub>3</sub>-O-N(CH<sub>3</sub>)-CH<sub>2</sub>, CH<sub>2</sub>-N(CH<sub>3</sub>)-N(CH<sub>3</sub>)-CH<sub>2</sub>, and O-N(CH<sub>3</sub>)-CH<sub>2</sub>-CH<sub>2</sub>.
6. (Original) The compound of claim 3 wherein the modified purine or pyrimidine moiety includes inosine.

7. (Original) The compound of claim 3 wherein the modified sugar moiety includes sugar mimetics comprising C<sub>4</sub> - C<sub>8</sub> cycloalkyl.

8. (Previously Amended): The compound of claim 3 wherein the modified 5' or 3' hydroxyl moiety is selected from the group consisting of C<sub>1</sub>-<sub>4</sub> alkoxy, intercalating agent, peptide, enzyme, and ribozyme.

9. (Presently Amended): The compound of claim 3 wherein the modified 2' hydroxyl moiety is selected from the group consisting of OH, SH, SCH<sub>2</sub>, OCH<sub>3</sub>, F, OCN, OCH<sub>2</sub>CH<sub>3</sub>, OCH<sub>3</sub>OCH<sub>3</sub>, OCH<sub>3</sub>O(CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>, O(CH<sub>2</sub>)<sub>n</sub>NH<sub>2</sub>, O(CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>, where n is from 1 to about 40; C<sub>1</sub> to C<sub>10</sub> lower alkyl, substituted lower alkyl, substituted lower alkaryl substituted lower aralkyl; Cl; Br; CN; CF<sub>3</sub>; OCF<sub>3</sub>; O, S, N-alkyl; O, S, N-alkenyl; SOCH<sub>3</sub>; SO<sub>2</sub>CH<sub>3</sub>; ONO<sub>2</sub>; NO<sub>2</sub>; N<sub>3</sub>; NH<sub>2</sub>; heterocycloalkyl, alkaryl; aminoalkylamino; polyalkylamino; substituted silyl; an RNA cleaving group; a cholesteryl group; a conjugate; a reporter group; an intercalator; and a group for improving the pharmacokinetic properties of an oligonucleotide as compared to an unmodified compound; and a group for improving the pharmacodynamic properties of an oligonucleotide as compared to an unmodified compound.

10. (Original) The compound of claim 1 wherein the base sequence of the oligonucleotide or analog thereof is selected from the group consisting of  
5'-GCCCATCACCATCTCTTC - 3',  
5'-ACACGGCATCATGAATCA - 3',  
5'-CCAGGGGCCGCTGGTTA-3',  
5'-ACCAAATTATATTCTA-3'.  
5'-CAGGCCCATCACCATCAC-3',  
5'-GCCAGGCCATCACCAT-3', and  
5'-TCTCTGACACGGCATCAT-3'.

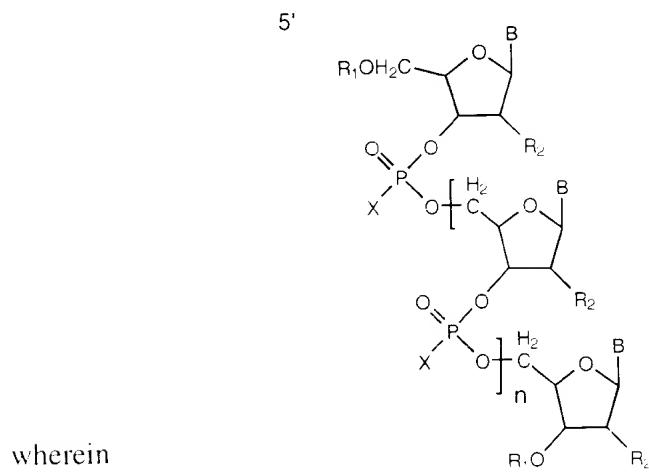
11. (Presently Amended) A composition for inhibiting expression of angiogenin comprising an effective amount of an oligonucleotide or analog thereof having a base sequence

complementary to a target portion of a nucleic acid encoding human angiogenin in a pharmaceutically acceptable carrier.

12. (Original) The composition of claim 11 wherein the base sequence of the oligonucleotide or analog thereof is selected from the group consisting of

5'-GCCCATCACCATCTCTTC - 3',  
5'-ACACGGCATCATGAATCA - 3',  
5'-CCAGGGGCCGCTGGTTA-3',  
5'-ACCAAATTATATTCTA-3',  
5'-CAGGCCATCACCATCAC-3',  
5'-GCCCAGGCCATCACCAT-3', and  
5'-TCTCTGACACGGCATCAT-3'.

13. (Presently Amended): A compound for inhibiting expression of angiogenin having the formula:



X is selected from the group consisting of O, S, and C<sub>1-4</sub> alkyl;

B is selected from the group consisting of adenine, guanine, cytosine, and thymine, selected such that the oligonucleotide has a complementary base sequence with a portion of a target nucleic acid strand coding for human angiogenin thereby inhibiting expression thereof;

R<sub>1</sub> is selected from the group consisting of H, C<sub>1</sub>-4 alkyl, intercalating agent, peptide, enzyme, and ribozyme;

R<sub>2</sub> is selected from the group consisting of H, OH, SH, SCH<sub>2</sub>, OCH<sub>3</sub>, F, OCN, OCH<sub>2</sub>CH<sub>3</sub>, OCH<sub>3</sub>OCH<sub>3</sub>, OCH<sub>3</sub>O(CH<sub>2</sub>)<sub>p</sub>CH<sub>3</sub>, O(CH<sub>2</sub>)<sub>p</sub>NH<sub>2</sub>, O(CH<sub>2</sub>)<sub>p</sub>CH<sub>3</sub>, where p is from 1 to about 10; C<sub>1</sub> to C<sub>10</sub> lower alkyl, substituted lower alkyl, substituted lower alkaryl, substituted lower aralkyl; Cl; Br; CN; CF<sub>3</sub>; OCF<sub>3</sub>; O, S, N-alkyl; O, S, N-alkenyl; SOCH<sub>3</sub>; SO<sub>2</sub>CH<sub>3</sub>; ONO<sub>2</sub>; NO<sub>2</sub>; N<sub>3</sub>; NH<sub>2</sub>; heterocycloalkyl, alkaryl; aminoalkylamino; polyalkylamino; substituted silyl; an RNA cleaving group; a cholesteryl group; a conjugate; a reporter group; an intercalator; a group for improving the pharmacokinetic properties of an oligonucleotide as compared to an unmodified oligonucleotide; and a group for improving the pharmacodynamic properties of an oligonucleotide as compared to an unmodified oligonucleotide; and

n is 5 to 100.

14. (Original) The compound of claim 13 wherein the base sequence is selected from the group consisting of

5'-GCCCATCACCATCTCTTC - 3',  
5'-ACACGGCATCATGAATCA - 3',  
5'-CCAGGGGCCGCTGGTTA-3',  
5'-ACCAAATTATATTCTA-3',  
5'-CAGGCCATCACCATCAC-3',  
5'-GCCAGGCCATCACCAT-3', and  
5'-TCTCTGACACGGCATCAT-3'.

Claims 15-23 (Cancelled)

24. (Previously Amended): The compound of claim 5 wherein the phosphorothioate is selected from the group consisting of alkyl phosphorothioate, cycloalkyl phosphorothioate, and phosphorodithioates.

25. (Previously Amended): The compound of claim 8 wherein the intercalating agent is a substituted acridine.

26. (Previously Amended): The compound of claim 13 wherein the intercalating agent is a substituted acridine.

27. (Previously Amended): The compound of claim 25 wherein the substituted acridine is selected from the group consisting of 2-methoxy-6-chloro-9-pentylaminoacridine, N-(6-chloro-2-methoxyacridinyl)-O-methoxydiisopropylaminophosphinyl-3-aminopropanol, and N-(6 chloro-2-methoxyacridinyl)-O-methoxydiisopropylaminophosphinyl-5-aminopentanol.

28. (Previously Amended): The compound of claim 26 wherein the substituted acridine is selected from the group consisting of 2-methoxy-6-chloro-9-pentylaminoacridine, N-(6-chloro-2-methoxyacridinyl)-O-methoxydiisopropylaminophosphinyl-3-aminopropanol, and N-(6 chloro-2-methoxyacridinyl)-O-methoxydiisopropylaminophosphinyl-5-aminopentanol.

29. (New): The compound of claim 3, wherein the modified 2' hydroxyl moiety is selected from the group consisting of OH, SH, SCH<sub>2</sub>, OCH<sub>3</sub>, F, OCN, OCH<sub>2</sub>CH<sub>3</sub>, OCH<sub>3</sub>CH<sub>3</sub>, OCH<sub>3</sub>O(CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>, O(CH<sub>2</sub>)<sub>n</sub>NH<sub>2</sub>, O(CH<sub>2</sub>)<sub>n</sub>CH<sub>3</sub>, where n is from 1 to about 10.

30. (New): The compound of claim 3, wherein the modified 2' hydroxyl moiety is a conjugate.

31. (New): The compound of claim 3, wherein the modified 2' hydroxyl moiety is a group for improving the pharmacodynamic properties of an oligonucleotide as compared to an unmodified compound.

32. (New): The compound of claim 3, wherein the modified 2' hydroxyl moiety is a group for improving the pharmacokinetic properties of an oligonucleotide as compared to an unmodified compound.